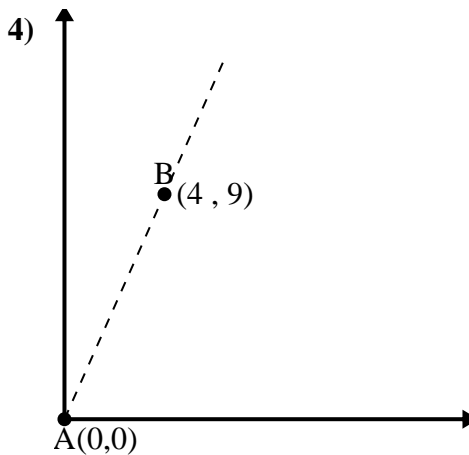
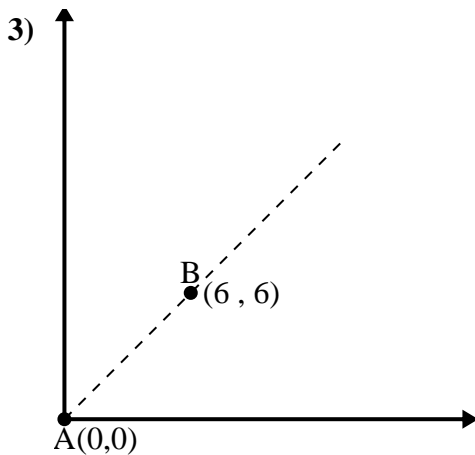
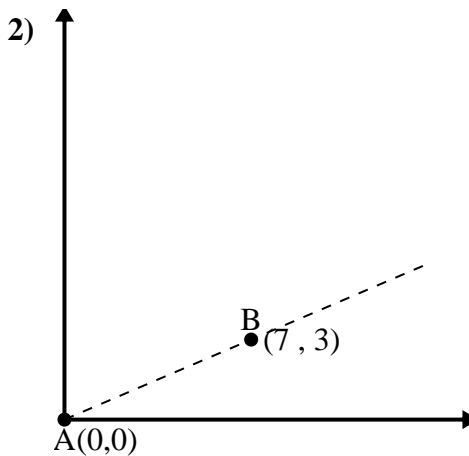
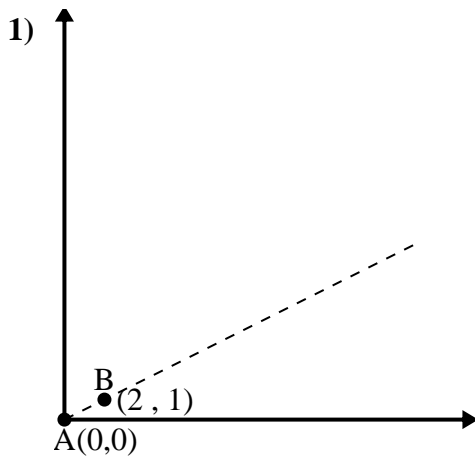




Use the law of Cosines to find the point B's angle relative to point A.

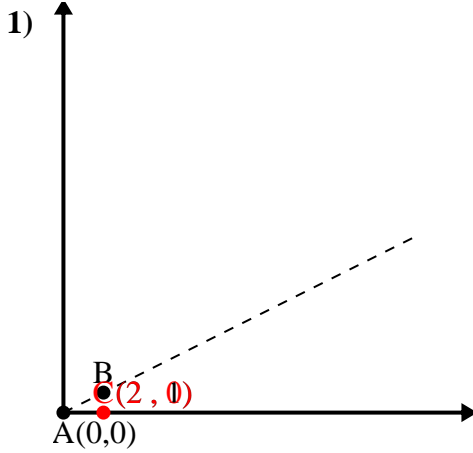


Answers

- 1. _____
- 2. _____
- 3. _____
- 4. _____



Use the law of Cosines to find the point B's angle relative to point A.



\overline{AB} length = 2.24

\overline{AC} length = 2

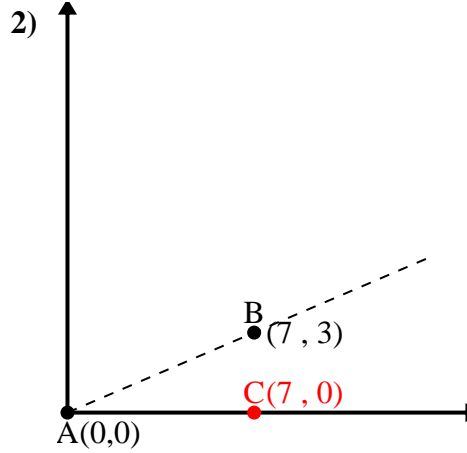
\overline{BC} length = 1

$(5 + 4 + 1) \div (2 \times 2.24 \times 2)$

0.89

$\cos^{-1}(0.89)$

26.57°



\overline{AB} length = 7.62

\overline{AC} length = 7

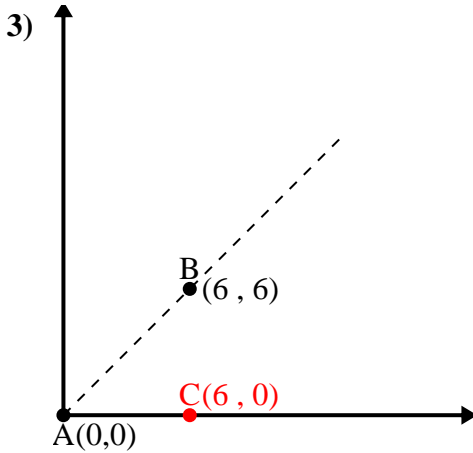
\overline{BC} length = 3

$(58 + 49 + 9) \div (2 \times 7.62 \times 7)$

0.92

$\cos^{-1}(0.92)$

23.2°



\overline{AB} length = 8.49

\overline{AC} length = 6

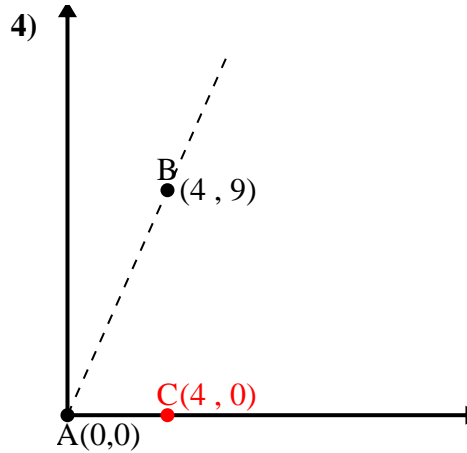
\overline{BC} length = 6

$(72 + 36 + 36) \div (2 \times 8.49 \times 6)$

0.71

$\cos^{-1}(0.71)$

45°



\overline{AB} length = 9.85

\overline{AC} length = 4

\overline{BC} length = 9

$(97 + 16 + 81) \div (2 \times 9.85 \times 4)$

0.41

$\cos^{-1}(0.41)$

66.04°

Answers

1. 26.57°

2. 23.2°

3. 45°

4. 66.04°